

To: Development Services Committee

From: Paul D. Ralph, BES, RPP, MCIP, City Manager,
Office of the City Manager

Report Number: DS-19-62

Date of Report: April 10, 2019

Date of Meeting: April 15, 2019

Subject: Proposed New Telecommunication Tower and Related
Equipment, 1609 Simcoe Street South, Signum Wireless

File: D-4630-2079, SPA-2019-04

1.0 Purpose

The purpose of this report is to provide background information for the public meeting on a proposed telecommunication tower by Signum Wireless (Signum) at 1609 Simcoe Street South.

Signum proposes to erect a 35 metre (115 ft.) high decorative shrouded tri-pole telecommunication tower with related at-grade equipment and fencing on the subject site. Freedom Mobile will be the primary tenant on the proposed tower.

The subject site is owned by the City of Oshawa. Signum proposes to lease from the City a 15 metre (49.21 ft.) by 15 metre (49.21 ft.) area for the telecommunication tower and related equipment and fencing. If City Council approves the proposed telecommunication tower location a separate report regarding the proposed lease terms will be provided to Council for consideration at a later date.

On January 28, 2019 City Council approved the telecommunication tower proposal in principle for the purpose of holding a public meeting and obtaining public input as required by the City's Telecommunication Policy.

A notice advertising the public meeting and an information brochure prepared by the applicant were mailed to all assessed property owners and tenants within 300 metres (984 ft.) of the subject site, the owners and tenants of the properties on the west side of Simcoe Street South, south of the former Glenholme School and to a number of public bodies. The distribution of the public notice involved input from the Ward 5 Council members and the Mayor consistent with the January 28, 2019 direction of City Council. In addition, notices advertising the public meeting were published in the Oshawa This Week and Oshawa Express newspapers. Finally, the notice was also posted on the City's website and further communicated through its Corporate Twitter and Facebook social media accounts.

In accordance with Council policy, Signum will make a presentation at the public meeting on its proposal.

Attachment 1 is a map showing the location of the subject site, the location of the proposed telecommunication tower and the existing zoning in the area.

Attachment 2 is an air photo showing the subject site and neighbouring properties.

Attachment 3 is a copy of elevation plans provided by the applicant showing the proposed tower design and the general design of the 15 metre (49.21 ft.) by 15 metre (49.21 ft.) compound area that Signum proposes to lease from the City.

Attachment 4 is a copy of the Site Selection/Justification Report dated March 7, 2019 submitted by Signum.

Attachment 5 is a copy of the City's Telecommunication Policy as approved by Council.

2.0 Recommendation

That the proposal for a new telecommunication tower and related equipment by Signum Wireless at 1609 Simcoe Street South as set out in Report DS-19-62 dated April 10, 2019, be referred back to the Development Services Department for further review and the preparation of a subsequent report and recommendation. This referral does not constitute or imply any form or degree of approval.

3.0 Executive Summary

Not applicable.

4.0 Input from Other Sources

4.1 Other Departments and Agencies

The telecommunication tower proposal has been circulated for comment and the identification of issues to a number of departments and agencies. These comments and issues will be considered and reported on, as appropriate, in a subsequent staff report which will provide a recommendation on the proposal.

5.0 Analysis

5.1 General

5.1.1 Background

Signum originally proposed to locate the proposed telecommunication tower at 1175 Nelson Street. (Automobile salvage yard at the southeast corner of Nelson Street and Wellington Avenue and north of Harbour Road). A public meeting concerning that proposal was held by the Development Services Committee on March 27, 2017. There were a number of concerns raised by the public during this public process in 2017. During

the public meeting the applicant mentioned that the preferred location for the proposed tower was south of Harbour Road on City-owned lands.

Following the public meeting concerning the proposed telecommunication tower at 1175 Nelson Street, the applicant approached City staff concerning the possibility of locating the proposed telecommunication tower on part of the City-owned lands at the Oshawa Harbour.

On January 30, 2018 Fontur International Inc. (Fontur) on behalf of Signum Wireless submitted a letter proposing lease terms for the proposed telecommunication tower on City-owned lands at 1609 Simcoe Street South and requested an exemption from the public meeting requirement of the City's Telecommunication Policy. Council considered Fontur's request on February 20, 2018 and denied the request for an exemption from the public meeting requirement of the City's Telecommunication Policy.

On January 4, 2019 Fontur submitted a letter containing proposed/revised lease terms.

On January 28, 2019 City Council approved the proposed telecommunication tower location in principle for the purpose of holding a public meeting and obtaining public input as required by the City's Telecommunication Policy.

5.1.2 Oshawa Official Plan and Zoning By-law Provisions for Telecommunication Facilities

Telecommunication facilities are permitted in any land use designation in the Oshawa Official Plan subject to any regulatory requirements. Telecommunication facilities are also permitted in any zone in Zoning By-law 60-94 under the Public Use section provided the proposal conforms to the Oshawa Official Plan.

5.1.3 Innovation, Science and Economic Development Canada

Innovation, Science and Economic Development Canada approves licences for radio and telecommunication companies to operate and ultimately authorizes and approves the locations of telecommunication antennas and towers.

A goal of Innovation, Science and Economic Development Canada is to find mutually acceptable locations for new antennas or towers. As such, it has defined roles for the City, the telecommunication company and Innovation, Science and Economic Development Canada.

For telecommunication tower proposals on **private** property the City has an opportunity to influence the location of new antennas and towers, not only from a land use compatibility perspective but from the community's perspective.

However, the City cannot prohibit the installation of a tower or an antenna on private property. It is Innovation, Science and Economic Development Canada's position that telecommunication facilities licensed by the authority of the Federal Government are not subject to municipal planning regulations such as the Oshawa Official Plan, Zoning By-law 60-94 or site plan control.

The City has the authority to approve or deny the use of **City-owned lands** for a telecommunication tower.

Telecommunication companies wishing to establish new towers or antennas must do the following:

- For certain proposed installations, telecommunication providers are required to consult with the City and follow any reasonable land use consultation process established by the City, including public consultation.
- Consult with Transport Canada where applicable to ensure antennas and tower structures comply with painting and lighting requirements for aeronautical safety.
- Ensure that telecommunications facilities operate in a manner that complies with Health Canada's limits of exposure to radio-frequency field emissions.
- If necessary, undertake an environmental assessment to comply with the Canadian Environmental Assessment Act.

Consultation between the City and telecommunication providers is intended to:

- (a) Discuss site options;
- (b) Ensure that local processes related to telecommunication systems are respected;
- (c) Address reasonable and relevant concerns; and
- (d) Obtain City concurrence in writing.

A telecommunication provider is prohibited from starting the installation of a telecommunication system until any required consultation process with the City has been completed or Innovation, Science and Economic Development Canada confirms concurrence with the consultation process undertaken. Consultation responsibilities will normally be considered complete when a telecommunication provider has:

- (a) Concluded consultation requirements with the City;
- (b) Carried out public consultation through the process established by the City; and
- (c) Addressed all reasonable and relevant concerns.

All consultation is to be completed within 120 days of a telecommunication provider's initial formal contact with the City. Where unavoidable delays are encountered, the City is expected to indicate to the telecommunication provider when a response can be expected to the proposal. If the City is not responsive, the telecommunication provider may contact Innovation, Science and Economic Development Canada. Depending on the individual circumstances, Innovation, Science and Economic Development Canada may support additional time or consider the City's consultation process complete.

In the event a telecommunication provider and the City cannot reach an agreement on the location of the telecommunication facility then Innovation, Science and Economic Development Canada can make a decision as to what is appropriate.

5.1.4 Council Policy for New Telecommunication Facilities

The City's policy for new telecommunication facilities was adopted by Council in June 2007 and amended in June 2008 and September 2014. A copy of the current Council policy forms Attachment 5 to this report. The applicant has submitted a site plan application pursuant to the Council Policy.

5.2 1609 Simcoe Street South

5.2.1 Proposed Telecommunication Tower/Existing Land Uses/Adjacent Land Uses

Signum is proposing to construct a 35 metre (115 ft.) high decorative shrouded tri-pole telecommunication tower with at-grade equipment and fencing on the most easterly portion of 1609 Simcoe Street South. This property is owned by the City of Oshawa. That portion of the site where the telecommunication tower is proposed is generally used as a gravel parking area which provides parking for matters such as major events at Lakeview Park including Canada Day and Ribfest.

To the north of the subject site is the Oshawa Creek and City-owned land where the former Oshawa Marina was located. To the east of the site across the Oshawa Harbour are lands used for Port Authority operations. To the west of the site are open space/parkland owned by the City and the Oshawa Creek. To the south is Federal Crown land used for Port uses and a privately owned property at 1615 Simcoe Street South with above ground tanks.

Signum has advised that the proposed telecommunication facility is required to improve coverage for the area surrounding the subject site. Signum further advises that the proposed design will help to minimize the number of cell towers in the area by maximizing co-locate opportunities.

The proposed tower design has been upgraded to a decorative style which would include City of Oshawa signage on the upper portion of the tower (see Attachment 3). This signage would have the ability to be lit and would act as a landmark.

In accordance with City Council policy, Signum has submitted a Site Selection/Justification Report for the proposed telecommunication facility (see Attachment 4).

5.2.2 Oshawa Official Plan and Zoning By-law 60-94

The subject site is designated as Open Space and Recreation with related Recreational, Marina and Tourist Nodes within a Special Development Area in the Oshawa Official Plan.

Lands adjacent to Lake Ontario, the Oshawa Harbour and the Oshawa Creek are shown as Hazard Lands on Schedule D-1 Environmental Management in the Oshawa Official Plan primarily due to potential flooding conditions.

Hazard Lands shall be used primarily for the preservation and conservation of land and/or the environment. These lands shall be managed in a manner to complement adjacent land uses and protect adjacent lands from physical hazards or their effects. In addition,

public works, transmission and utility lines and municipal uses, compatible with the types of hazard identified are also permitted within Hazard Lands.

Simcoe Street South is a Type "C" Arterial Road in this area of the City.

The site is zoned HBC(1).T12 (Harbour Commercial) in Zoning By-law 60-94. The HBC(1) Zone permits certain commercial uses such as professional offices, recreation uses, restaurants and retail stores.

5.3 Site Design/Land Use Considerations

The applicant proposes to construct a 35 metre (115 ft.) high decorative shrouded tri-pole telecommunication tower and related equipment and fencing on the most easterly side of 1609 Simcoe Street South.

Some of the specific matters this Department will be reviewing during the further processing of the proposal include:

- (a) The appropriateness of the proposed telecommunication tower in this location;
- (b) The appropriateness of the proposed tower design, tower colour and siting on the property;
- (c) Fencing issues; and
- (d) The opportunity for co-location for other telecommunication service providers.

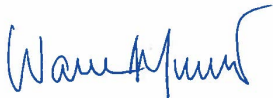
6.0 Financial Implications

There are no financial implications associated with the recommendation in this report.

If the proposed telecommunication tower location is approved by City Council, a future report will be provided to the Development Services Committee concerning proposed key lease terms for the telecommunication tower on City-owned lands.

7.0 Relationship to the Oshawa Strategic Plan

Holding a public meeting on proposed telecommunication towers advances the Accountable Leadership Goal of the Oshawa Strategic Plan.



Warren Munro, HBA, MCIP, RPP, Director,
Planning Services

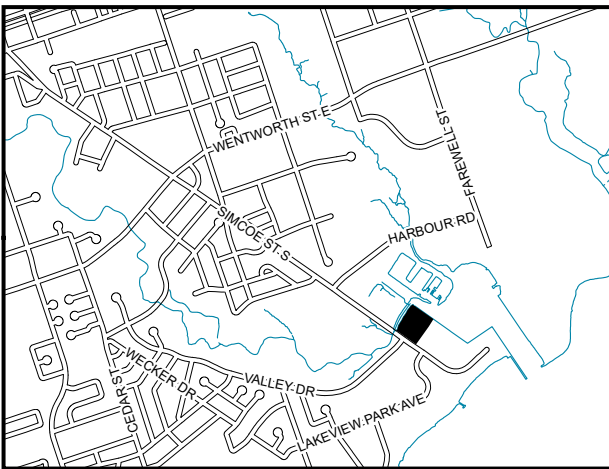


Paul D. Ralph, BES, RPP, MCIP, City Manager,
Office of the City Manager

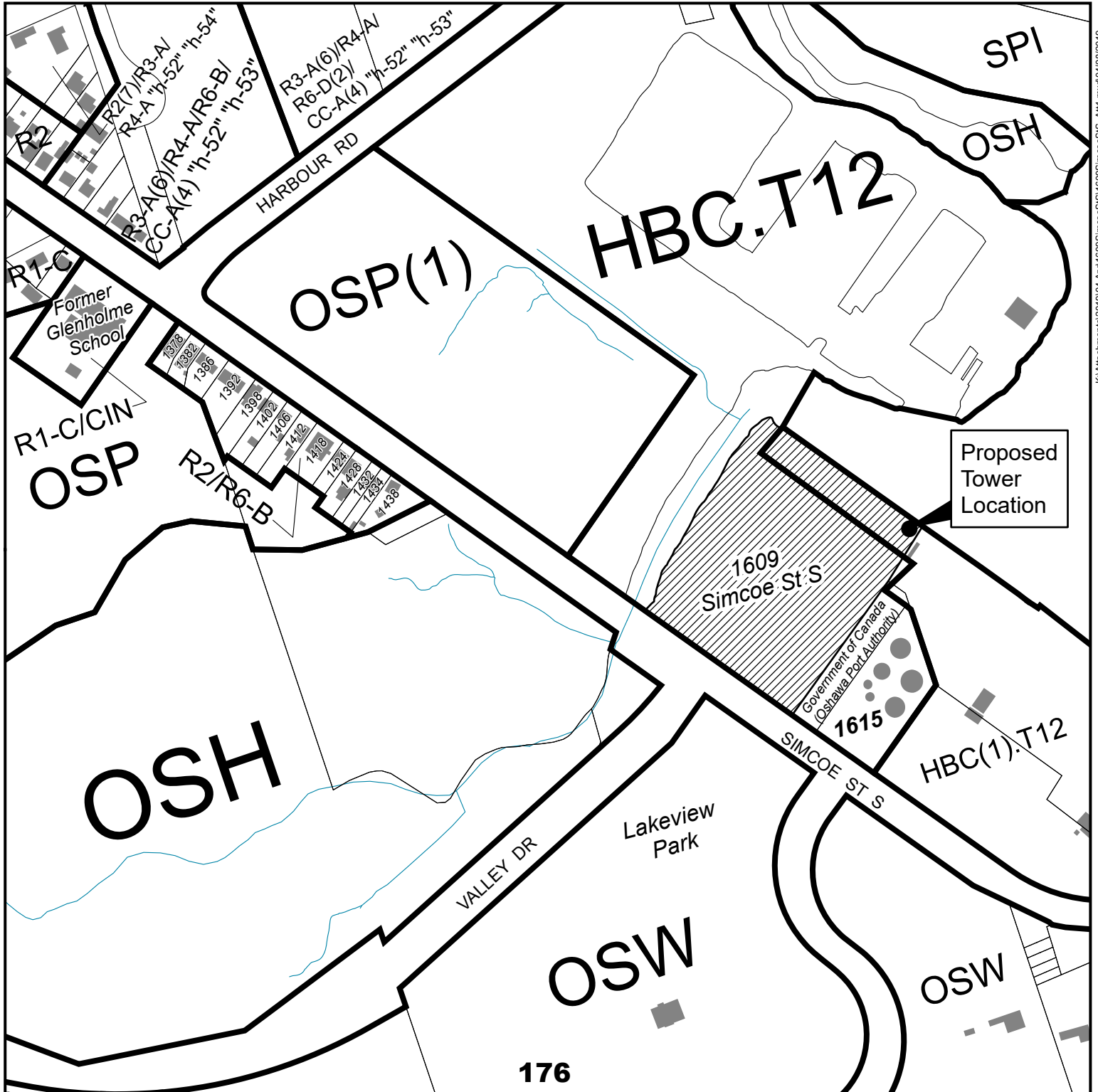
Subject: Proposed New Telecommunication Tower
and Related Equipment

Address: 1609 Simcoe Street South

File: D-4630-2079, SPA-2019-04



Subject Site 



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Address: 1609 Simcoe Street South
File: D-4630-2079, SPA-2019-04



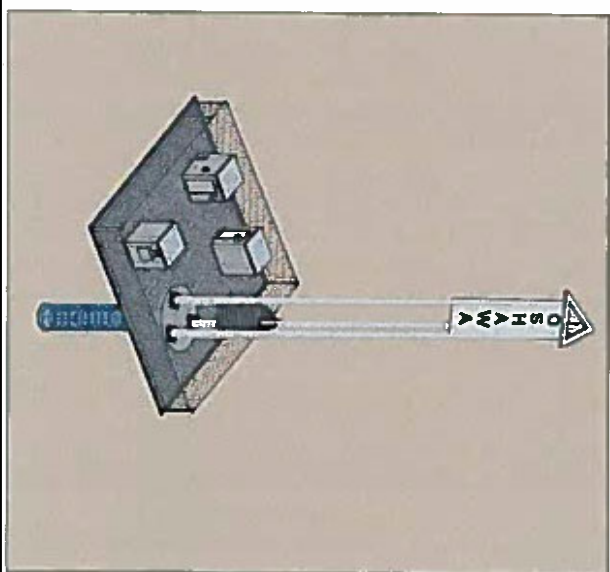
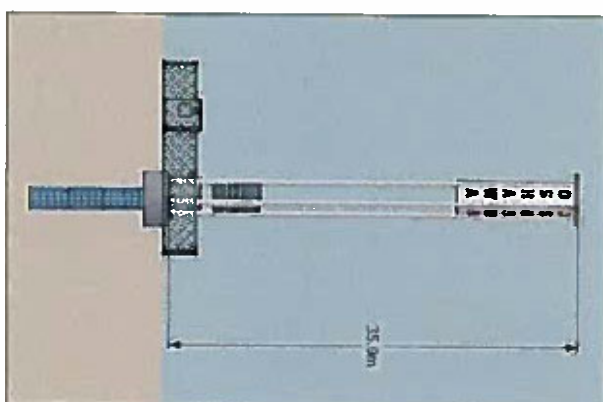
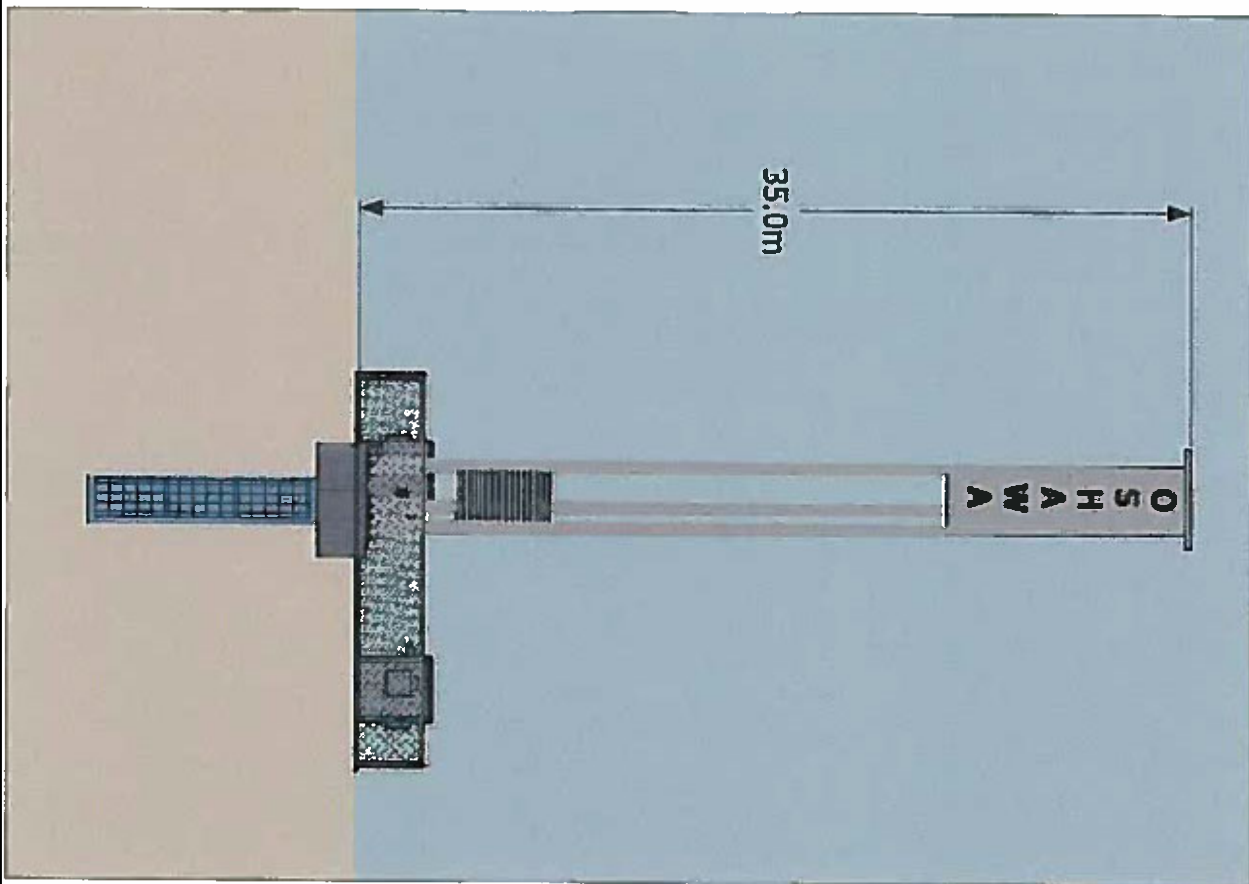
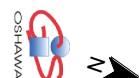
 1609 Simcoe Street South

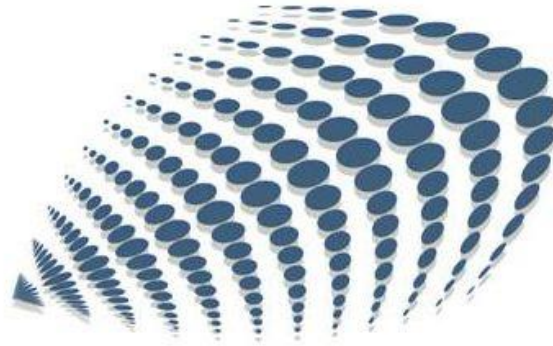
City of Oshawa
Development Services Department 



Title: Proposed Tower Design
Subject: Proposed New Telecommunication Tower and Related Equipment
Address: 1609 Simcoe Street South
File: D-4630-2079, SPA-2019-04

City of Oshawa
Development Services Department





SIGNUM WIRELESS

March 7, 2019

Site Selection & Justification Report

Wireless Telecommunications Tower Site

1609 Simcoe Street South, Oshawa, Ontario

Signum Wireless – contracted to:
FONTUR International
70 East Beaver Creek Road, Suite 22
Richmond Hill, ON L4B 3B2

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Introduction

The on-going increase in the use of personal cellular telephones, smartphones and other wireless devices such as broadband internet hubs for personal, business and emergency purposes requires the development of new wireless telecommunications infrastructure. This infrastructure includes new antennas and their support structures which are required meet the demands of increased capacity and broadening service areas. Without antennas in close proximity to the wireless device, wireless communication is simply not possible.

The use of wireless telecommunications is firmly entrenched into Canadian society and economy. Canadians currently use more than 27 million wireless devices on a daily basis including, wireless phones, pagers, mobile radios, mobile satellite phones and broadband internet devices. Three-quarters of every Canadian household have access to a wireless phone, and more than half of all phone connections are wireless. More importantly, each year Canadians place more than 6 million calls to 911 or other emergency numbers from their mobile phones.

As part of its on-going commitment to provide high quality wireless services, Signum Wireless has determined that a new wireless telecommunications facility is required in the City of Oshawa.

This report documents Signum's site selection process, the details of the proposal, its compliance with the City's regulations and the applicable Industry Canada (now Innovation, Science, & Economic Development, or ISED) provisions.

As a general matter, the Signum Wireless site selection process is a balanced exercise that must meet our clients' network coverage objectives, having regard for land use constraints and its obligation to its customers to provide a high quality of service.

Wireless telecommunications facilities are regulated by the Federal Government under ISED and need not follow municipal or provincial planning approvals. However, in recognition of the policy vacuum which exists as a result of that circumstance, ISED requires that wireless telecommunication carriers consult with land use authorities.

Purpose - Background & Coverage Requirement

A radio antenna and a tower are the two most important parts of a radio communication system. The antenna is needed to send and receive signals for the radio station. The tower raises the antenna above obstructions such as trees and buildings so that it can send and receive these signals clearly. Each radio station and its antenna system (including the tower) provide radio coverage to a specific geographic area, often called a cell. The antenna system must be carefully located to

ensure that it provides a good signal over the whole cell area, without interfering with other stations and can “carry” a call as the user moves from cell to cell.

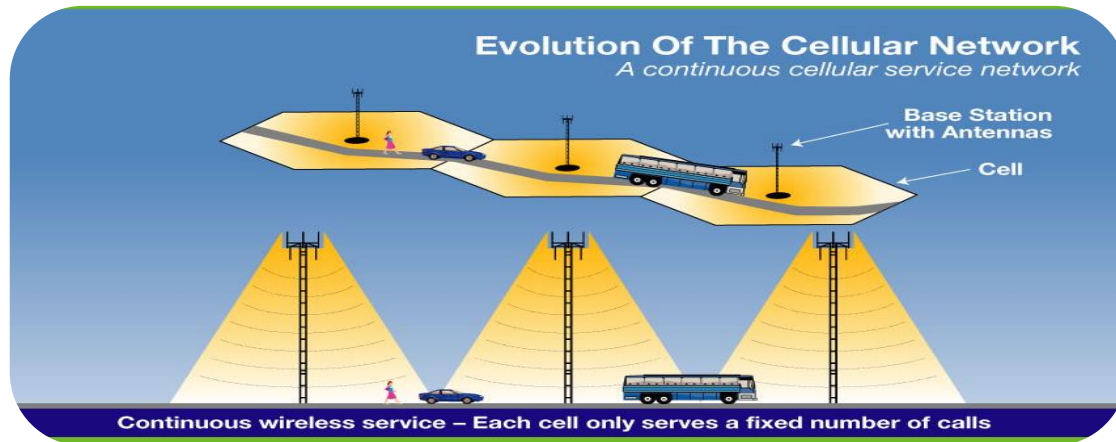


Figure 1

If the station is part of a radio telephone network, the number of stations needed also depends on how many people are using the network. If the number of stations is too small, or the number of users increases people may not be able to connect to the network, or the quality of service may decrease.

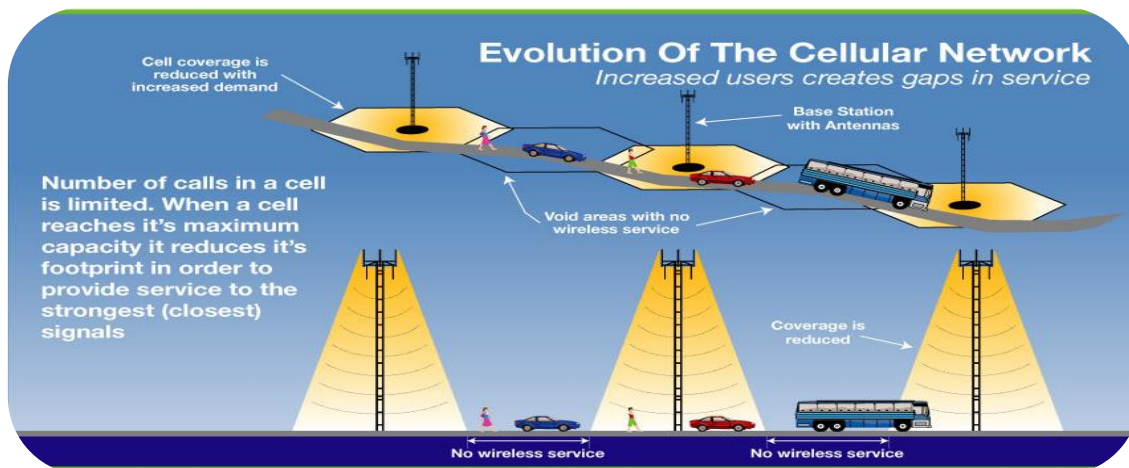


Figure 2

As the number of users exceeds the capacity of the radio station to receive and send calls, the coverage area for the cell shrinks and the shrinkage between cells creates coverage holes.

As demand increases for mobile phones and new telecommunication services, additional towers are required to maintain or improve the quality of service to the public and restore contiguous wireless service.

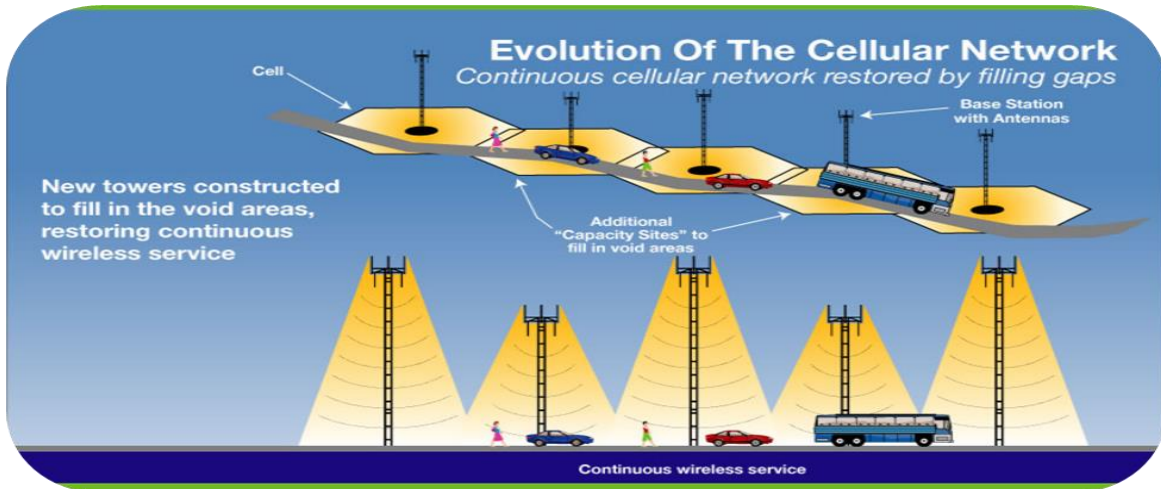


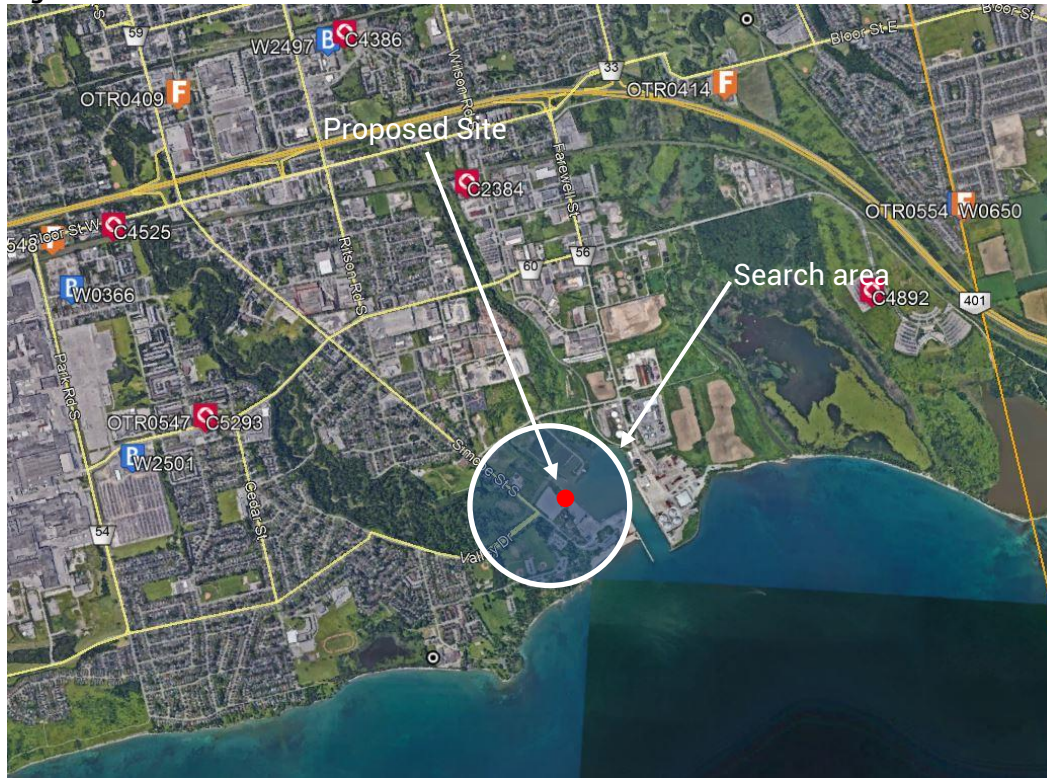
Figure 3

In this case, our clients' Radio Frequency Engineering department(s) have determined the need for a service upgrade to adequately provide continuous coverage and service to their existing and future customer base in the City of Oshawa. Currently, our clients' networks are burdened by a combination of poor voice and data quality, specifically in high-use residential areas and major transportation corridors. In some cases, the coverage is so poor that a handset would be unable to place a mobile call at all in the subject location and surrounding area. The result of this situation is on-going customer complaints, high "dropped call" rates, and in extreme circumstances, the potential inability to place a mobile call that may be absolutely critical in an emergency situation.

Our clients are committed and mandated by their respective licenses to ensure the best coverage and service to the public and private sectors. The proposed site near Simcoe Street South & Valley Drive is extremely important in terms of providing coverage to an under-served area and adding capacity to existing networks. Signum Wireless wants to provide infrastructure necessary to ensure that both residents and visitors to the area have access to the service they are accustomed to.

Signum Wireless's objective for this location is to provide the infrastructure for reliable coverage and capacity into nearby residential and industrial areas, as well as in the future waterfront recreation area. The objective is to have greater coverage in Oshawa, specifically in frequently-travelled corridors where demand for signal is high.

Figure 4 – Current Telecommunications Infrastructure in south Oshawa



Identification & Evaluation of Different Site Location Options

Our clients' existing coverage in Oshawa is in need of upgrading. Like all other infrastructure, it must keep up with changes in the ways people use technology, as well as general population growth of the area. As illustrated in the map in **Figure 4**, there is a gap in wireless telecommunications infrastructure in the area of coverage need. (Existing infrastructure is represented by markers on the map.) All existing infrastructure is located at least 1.8 kilometres away from the proposed site.

Based on research by each of our clients' respective Radio Frequency Engineering teams, a general search area location was chosen near the intersection of Simcoe Street South and Valley Drive. A site within the search ring on the map below (**Figure 5**) would, from an engineering point of view, meet the coverage objectives of our clients' networks. Typically, in urban areas, the search area can have a radius of between 250 and 500 metres.

Figure 5 – Approximate search area



A review of existing telecommunications installations within the search area, as illustrated in **Figure 4**, revealed that there are no existing towers that would meet our clients' coverage requirements (i.e., within the search area). The nearest built antenna installation is a Rogers Communications 48-metre tower. Given the structure's distance from the centre of the search area, the type of structure, and the low height available for equipment, it is not a viable co-location option. Generally speaking, the structures in the area are low-rise, and so a rooftop installation is also not viable.

Selection & Justification of Preferred Location

Proposed Site Location

The location which Signum Wireless proposes for a wireless telecommunications site in Oshawa is on the property municipally known as 1609 Simcoe Street South. (**Figure 6**).

The property's legal description is: PT LT C2 SHEET 25 PL 335 OSHAWA; PT LT C19, C20 SHEET 27 PL 335 OSHAWA PARTS 1, 4, 5 AND 6 PLAN 40R27129 AND PARTS 1 TO 5 PLAN 40R27324, PLAN 40BA75 CONFIRMS THE NORTHERLY, WESTERLY, EASTERLY AND THE SOUTHERLY LIMITS OF THE PIN CITY OF OSHAWA

Figure 6 – Proposed location



Approximate 15m x 15m compound location is highlighted in red

The site itself is located approximately 158 metres northeast of Simcoe Street South.

The geographic coordinates for the site are as follows;

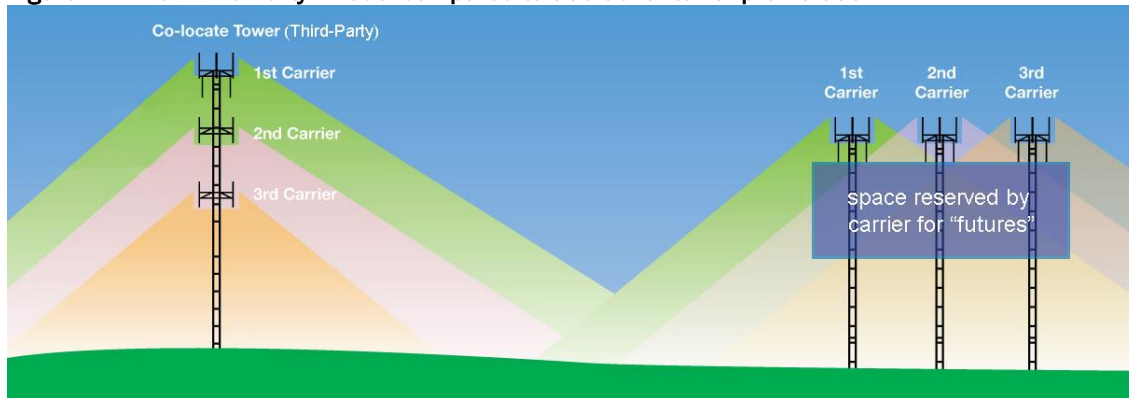
Latitude: 43° 52' 1.6026"

Longitude: -78° 49' 41.883"

Signum Wireless' proposed tower will accommodate wireless antennas for the purpose of providing wireless communications coverage and network capacity. To the end user, this translates into our clients' suite of wireless technologies such as cellular phone coverage and data services. Depending on the signal strength, and the amount of data being downloaded, the regular user should not see a difference between this and a fibre line.

Towers are limited in terms of both allowable space and engineering capacity. Each antenna array requires a separation of vertical space so they do not cause interference with each other.

Figure 7 – The “Third-Party” model compared to traditional tower proliferation



Signum Wireless strongly supports co-location on existing towers and structures and designed the tower to accommodate future carriers on the tower. The use of existing structures minimizes the number of new towers required in a given area and is generally a more cost-effective way of doing business. It also allows the City of Oshawa to reduce the potential for tower proliferation by multiple carriers needing space for their equipment (**Figure 7**). The proposed tower is designed to support and indeed encourage a number of additional carriers.

Description of Proposed System

The proposed system for 1609 Simcoe Street South is a steel shrouded tri-pole communications tower that is 35 metres in height. A fenced-in 15m x 15m compound would also be constructed, and would occupy a ground compound area of approximately 225 square metres.

Our clients propose to install antenna and microwave equipment. The tower would initially provide wireless voice and data services for subscribers to our clients' networks.

Justification of Proposed Siting

Prevalent in our search area are industrial and municipally owned recreational uses. The proposed tower has been sited on municipal property in order to respect the local urban area and to mitigate any potential impacts, as well as to maximize the distance from residential clusters.

Being located in this area would facilitate carriers having coverage along the waterfront and in nearby industrial, recreation, and residential areas. It is important that residents and business owners in this area of Oshawa have access to high-speed data and reliable cellular coverage, even if they are just passing through the area.

The tower is proposed in an area that we determined to be the best location from a coverage viability and land use perspective.

Statement Indicating Need for Tower Height

The proposed tower has been designed at a height of 35 metres. Due to the coverage and capacity hole currently in our clients' network in this area of Oshawa, this height is required to provide optimal coverage to the area, and to "pass on" calls and other uses effectively to surrounding towers in the network.

A shrouded tri-pole tower at a height of 35 metres also means that two or more carriers or other broadcasters would be able to install their equipment on the tower. For the City of Oshawa, this is an added benefit, as it works to reduce the number of towers required in this area in the future.

Health Canada's Safety Code 6 Compliance

Signum Wireless and our clients attest that the radio antenna system described in this report will comply with Health Canada's Safety Code 6 limits, as may be amended from time to time, for the protection of the general public including any combined effects of additional carrier collocations and nearby installations within the local radio environment.

Control of Public Access

The facility would include a locked, alarmed and electronically monitored mechanical equipment shelter. Fencing would be installed around the base of the tower and equipment shelter(s) and would include one locked gate access point.

Local Environment

Signum Wireless attests that the radio antenna system described in this notification package is not subject to the *Canadian Environmental Assessment Act*.

Transport & NAV Canada Assessment

Signum Wireless attests that the radio antenna system described in this notification package will comply with Transport Canada / NAV Canada aeronautical safety requirements. Signum Wireless has made all necessary applications to Transport Canada and NAV Canada.

Both agencies have yet to complete their review of the proposed installation. Signum Wireless will endeavor to provide the results of each respective assessment to the City of Oshawa as soon as they become available.

Figure 8 – Distance to nearest residential



Distance to Residential

The nearest residential dwelling to the proposed tower is approximately 365 metres north west of the proposed location (Figure 8).

Engineering Practices

Signum Wireless attests that the radio antenna system described in this notification package will be constructed in compliance with the National Building Code of Canada and comply with good engineering practices including structural adequacy.

Justification of Preferred Tower Type

Due to the dearth of existing telecommunication facilities in the area, and the demand for improved wireless services, there is a great need for new wireless signal in the search area. As a result, Signum Wireless has designed a shrouded tri-pole tower. This design, in addition to the proposed height of the tower (35m) should allow the City of Oshawa to minimize the amount of towers required in the area, as it maximizes co-location capability while respecting the sensitive nature and aesthetic value of the local area.

Public Consultation

Signum Wireless is committed to effective public consultation. As a result, a full public consultation process will be completed in compliance with the town protocol.

Conclusion

Canadians as a whole are becoming more dependent on wireless products for personal, business, and emergency purposes. In many areas of the country, more than half of all 9-1-1 calls are now made via a mobile phone. To that end, an improvement upon the current wireless coverage in this area of Oshawa would be a benefit to the community.

Signum Wireless believes the proposal:

- Is in a location technically suitable to meet our clients' network requirements;
- Is a design that complies with ISED's CPC 2-0-03 policy and the City of Oshawa's guidelines; and:
- Is a development compatible and appropriate with surrounding uses, and will have limited impact on existing land uses in the vicinity.

Signum Wireless is committed to effective public and municipal consultation. Should you have any questions or require further information regarding our proposal, please do not hesitate to contact the undersigned.

Yours truly,

Evan Turunen
FONTUR International Inc.
Consultant for Signum Wireless

Council Policy for New Telecommunication Facilities

1. Purpose

To establish policies and procedures for the installation of new telecommunication antennas, towers and related structures which emphasize the following:

- Selecting locations for telecommunication facilities which ultimately minimize the number of such facilities and their visual impact;
- Allowing input from the public; and
- Providing a clear process for the installation of new telecommunications facilities.

Innovation, Science and Economic Development Canada, the approval authority for regulating telecommunications facilities, ensures that municipalities are consulted prior to the construction of towers and antenna structures. The role of the City is to provide comments with respect to land use compatibility and community input. Innovation, Science and Economic Development Canada advises that the City has no constitutional authority to regulate or prohibit telecommunications facilities.

2. Source

City Council approval on June 11, 2007, as amended on June 2, 2008 and September 22, 2014.

3. Policy

3.1 Definitions

Antenna shall mean a device for transmitting and receiving electromagnetic waves, wireless communication signals or other communication signals.

Alternative tower structures shall mean man-made support structures that camouflage or conceal the presence of antennas or towers such as flagpoles, clock towers, church steeples, street lights, artificial trees and other everyday features.

Co-location shall mean the placement of one or more antenna on the same telecommunication tower or alternative tower structures.

Equipment Shelter shall mean a structure containing equipment necessary to transmit and receive signals.

Height shall mean the height of an antenna system measured from the lowest ground level at the base, including the foundation, to the tallest point of the antenna system. Depending on the particular installation, the tallest point may be an antenna, lightning rod, aviation obstruction lighting or some other appurtenance. Any attempt to artificially reduce the height (addition of soil, aggregate, etc.) will not be included in the calculation or measurement of the height of the antenna system.

Telecommunications Facilities shall mean telecommunication tower and/or antenna and an equipment shelter.

Telecommunications Towers shall mean structures designed and constructed to support one or more antennas, including lattice towers, monopoles and guyed towers.

3.2 Site Selection for New Telecommunication Towers

- (a) The installation of new telecommunications towers is discouraged unless all other options within the telecommunication company search area have been explored and are considered inappropriate. The preferred methods of achieving additional capacity are:
 - (i) Co-location on existing towers;
 - (ii) Location on hydro transmission towers;
 - (iii) Location of towers within or adjacent to hydro transmission corridors;
 - (iv) Use of alternative tower structures; and
 - (v) Clustering adjacent to existing telecommunication towers.
- (b) A telecommunication tower shall be located in a manner which minimizes its visual impact. When locating a new telecommunication tower the following shall be considered:
 - (i) Avoidance of natural features, significant vegetation, hazard lands (e.g. floodplains, steep slopes) and environmentally sensitive areas;
 - (ii) Locations shall be sensitive to residential areas, historic sites, environmentally sensitive areas and hazard lands;
 - (iii) Alternative tower structures are encouraged within the Major Urban Area and Hamlet boundaries as identified in the Oshawa Official Plan;
 - (iv) An appropriate setback shall be maintained from road right-of-ways;
 - (v) Avoiding areas of topographical prominence, where possible, to minimize long/short range views; and
 - (vi) Locations and heights that are in compliance with Transport Canada's requirements relative to the Oshawa Municipal Airport.

3.3 Site Design and Layout

(a) New Telecommunication Towers

The following shall be considered in the site design and layout of new telecommunications towers:

- (i) Planting of trees and shrubs around the perimeter fencing to mitigate the visual impact of the tower and equipment shelter,

- (ii) Small identification sign(s) of the telecommunication company may be permitted on the equipment shelter or perimeter fencing subject to the issuance of a sign permit as necessary; and
- (iii) Where alternative tower structures are not feasible, telecommunication towers and equipment shelters should blend in with the context (e.g. colour, etc.) of its surroundings. The architecture of an equipment shelter should reflect the area within which it is located (e.g. pitched roof, or brick if in a residential area).

(b) Installations on Roof Tops or Existing Structures

When locating a telecommunication antenna or equipment shelter on rooftops or existing structures, telecommunication companies shall endeavour to minimize the visual impacts of such uses by considering the following:

- (i) Wall mounted antenna on the side of a building are discouraged below the roof but may be permitted subject to appropriate design. Wall mounted antenna on penthouses and stairwells above the roof are preferred;
- (ii) Utilizing alternative tower structures;
- (iii) New antennas should have a maximum height of 6 metres above the highest point of the building or existing structure and it should be setback a minimum of 3 metres from the roof edge on a building;
- (iv) Equipment shelters on roof tops should be setback from the roof edge as appropriate with appropriate consideration of the structural design of the roof;
- (v) The colour and architectural style of the antenna and equipment shelter shall blend in with the building or structure;
- (vi) If an equipment shelter is aboveground and related to a roof-top antenna then the architecture of the equipment shelter must reflect appropriate urban design considerations related to the area within which it is located (e.g. pitched roof, brick if in a residential area); and
- (vii) Locations and heights that are in compliance with Transport Canada's requirements relative to the Oshawa Municipal Airport.

3.4 Other

- (a) The City will encourage buildings greater than 6 storeys to be pre-designed to accommodate antenna and equipment shelters.
- (b) Telecommunication companies shall be encouraged to remove facilities after their lease has expired.

4. Procedure

4.1 Pre-consultation

Prior to the installation of telecommunications facilities, telecommunication companies are encouraged to consult with the City's Planning Services Branch in the Development Services Department to discuss the site search area, site selection, including land use compatibility, sensitive visual areas and vistas, existing and proposed land uses and other potential impacts. Consultation with the Chief Building Official may also be required.

Telecommunications companies are requested to consult with the City on proposals that involve above ground equipment shelters even though they may be exempt according to Innovation, Science and Economic Development Canada's procedures to ensure the shelters are appropriately located, designed (e.g. architecture) and landscaped given the site context (e.g. in a residential area).

4.2 Submission Requirements

For the purposes of administration and processing, telecommunication companies will be required to complete an application for site plan approval. The application shall be submitted to the Planning Services Branch in the Development Services Department with the appropriate fee. Such applications are not processed under the Planning Act.

(a) New Telecommunication Towers

All proposals for new telecommunication towers, where consultation with the City is required by Innovation, Science and Economic Development Canada, will generally include the following information:

- (i) Written justification from the telecommunication company, as to the need for the telecommunication tower and that the proposed location for the new tower is the preferred alternative. Non-tower, co-location and alternative tower structures shall be addressed in the justification;
- (ii) A site plan showing such items as the subject property, including the existing property lines and the leased area (if applicable), existing and proposed buildings, fences, buffering, building elevations, access, parking and the type and height of the proposed tower structure. Additional plans such as a landscape plan, a site servicing/grading plan and erosion and sediment control plan may also be required later in the review process;
- (iii) Pictures of the location and the proposed tower and associated facilities superimposed on the picture from four directions, north, south, east and west;
- (iv) A plan showing the horizontal distance between the tower installation and the nearest residential zone and/or residential dwelling; and
- (v) A public notification package containing the information required by Appendix 1 – Innovation, Science and Economic Development Canada's Default Public Consultation Process – Public Notification Package in Innovation, Science

(b) Installations on Roof Top or Existing Structures

All proposals for telecommunication antenna or equipment shelters on roof tops or existing structures, where consultation with the City is required by Innovation, Science and Economic Development Canada, will generally include the following information:

- (i) A statement from the telecommunication company on the need for any increase in proposed tower height if the increased height is greater than 25% of the originally approved height;
- (ii) A plan showing the location and setbacks for the proposed antenna and associated facilities on the roof top or existing structure;
- (iii) A plan showing such items as building elevations and the location, type and height of the proposed antenna. A site plan showing such items as the subject property, the leased area, existing and proposed buildings, fences, buffers, access and parking is required for any aboveground equipment shelter. Additional plans such as a landscape plan, a site servicing/grading plan and erosion and sedimentation control plan may also be required at a later date for any aboveground equipment shelter/uses related to the antenna;
- (iv) Any relevant information as may be required by the Chief Building Official at a later date during the review process; and
- (v) Upon review of the site plan, the Development Services Department may require the telecommunication company to submit pictures of the building or structure with the proposed antenna and equipment shelter superimposed on the picture from four directions; north, south, east and west.

(c) Alterations to Existing Facilities

Where a modification to an existing site is proposed, which may include, but not be limited to, an increase in the height of the tower, additional equipment shelters or entrances, an amendment to an approved Site Plan may be required.

4.3 Public Consultation Process

(a) Exemptions from Public Consultation

Public consultation is not required in the following situations:

- (i) For installations of roof-top antenna, roof-top equipment shelters and wall mounted antenna that do not project more than 2 metres from the face of the building provided they are designed and are in a location on the roof acceptable to the Development Services Department; and

- (ii) Co-location of an antenna on an existing telecommunication tower or hydro tower.

City Council may also exempt other proposals from public consultation as appropriate. For example, City Council may consider exempting proposals from the public process where towers are proposed adjacent to 250 kv or 500 kv hydro towers or adjacent to other telecommunication towers or where equipment shelters related to a roof top antenna are located on sites which are occupied by non-residential uses or that about non-residential uses.

Notwithstanding any provisions of this policy to the contrary the City's policy does not apply to the following types of installations, based on Innovation, Science and Economic Development Canada's exemption criteria:

- (i) New Antenna Systems: where the height is less than 15 metres above ground level. This exclusion does not apply to antenna systems proposed by telecommunications carriers, broadcasting undertakings or third party tower owners;
- (ii) Existing Antenna Systems: where modifications are made, antennas added or the tower replaced, including to facilitate sharing, provided that the total cumulative height increase is not greater than 25% of the height of the initial antenna system installation. No increase in height may occur within one year of completion of the initial construction. This exclusion does not apply to antenna systems using purpose built antenna supporting structures with a height of less than 15 metres above ground level operated by telecommunications carriers, broadcasting undertakings or third party tower owners;
- (iii) Non-Tower Structures: antennas on buildings, water towers, lamp posts, etc. may be excluded from consultation provided that the height above ground of the non-tower structure, exclusive of appurtenances, is not increased by more than 25%;
- (iv) Temporary Antenna Systems: used for special events or emergency operations and must be removed within three months of the start of the emergency or special event; and
- (v) No consultation is required prior to performing maintenance on an existing antenna system.

(b) Required Public Consultation

- (i) Subject to the exemptions set out above, a public meeting is required for any new tower or any new aboveground equipment shelter.
- (ii) The Development Services Department shall give written notice, by regular mail, of the public meeting to the owners and tenants of the lands within the circulation area around the subject property, to all Members of City Council and to adjacent municipalities if the new tower is within 500 metres of the municipal boundary. The notice shall be sent at least 30 days before the public meeting date. A newspaper advertisement notifying the public of any

tower proposed to be 30 metres or more in height is required as part of the public consultation process. The newspaper advertisement will be paid for by the telecommunication company.

The circulation area for the notice is as follows:

- Within the Major Urban Area boundary - 120 metres or 4 times the height of the tower which ever is greater measured from the outside perimeter of the supporting structure. For the purpose of this requirement, the outside perimeter begins at the furthest point of the supporting mechanism, be it the outermost guy line, building edge, face of the self-supporting tower, etc.;
- In all other areas – 250 metres measured from the outside perimeter of the supporting structure. For the purpose of this requirement, the outside perimeter begins at the furthest point of the supporting mechanism, be it the outermost guy line, building edge, face of the self-supporting tower, etc.;

The notice shall include, at a minimum, the following information:

- The location of the proposed site;
- Date, time and location of Public Meeting; and
- The name and telephone number of a contact person employed by the telecommunication company, as well as a municipal contact person.

An information package provided by the telecommunication company will be included with the mailed notice.

The notice shall be clearly marked, making reference to the proposed antenna system, so that it is not misinterpreted as junk mail and that the face of the package must clearly reference that the recipient is within the prescribed notification radius of the proposed antenna system.

- (iii) The Public Meeting shall be held by the Development Services Committee.

At the Public Meeting, the telecommunication company shall be responsible for displaying all the necessary drawings and pictures and making a presentation. Subsequent to the Public Meeting, the telecommunication company shall provide to the Development Services Department a letter indicating how the telecommunication company will address the concerns raised at the public meeting.

4.4 Approvals

(a) Letter of Recommendation with a Public Meeting

- (i) After the public meeting, the Development Services Department will prepare a report for the consideration by the Development Services Committee. The telecommunication company and any person that attended the public meeting and left their names will be invited to the Development Services

Committee meeting to make any comments on the staff report, as appropriate. The Development Services Committee will then make a recommendation to Council. The telecommunication company or any person can request to speak to Council if they do not agree with the Development Services Committee recommendation. Council will then take a position on the proposal.

- (ii) The Development Services Department will issue to the telecommunication company (with a copy to Innovation, Science and Economic Development Canada) a Letter of Recommendation (Yes; No; Yes with conditions) stating that the company has consulted with the City and advising of Council's position on the proposal. Such letter will be provided within two weeks from the date of Council's decision or, in the case where a Letter of Undertaking is required, when a Letter of Undertaking has been completed to the City's satisfaction.

(b) **Letter of Recommendation without a Public Meeting**

- (i) City Council delegates the responsibility to provide the City's position on any proposal that does not require a public meeting to the Commissioner of Development Services;
- (ii) The Development Services Department will issue to the telecommunication company (with a copy to Innovation, Science and Economic Development Canada) a Letter of Recommendation (Yes; No; Yes with conditions) stating that the company has consulted with the City and advising of the City's position on the proposal. Such letter will be provided within two weeks of site plan approval including the execution of a Letter of Undertaking if required.

(c) **Letter of Undertaking**

- (i) A Letter of Undertaking is required only in situations where:
 - A new telecommunication tower is proposed;
 - A new aboveground equipment shelter is proposed; and
 - An upgrade to an existing facility is required by the City to improve the aesthetics or address grading issues.
- (ii) When the Development Services Department is satisfied with the site location, layout and design, the telecommunication company shall provide a Letter of Undertaking in the City's prescribed format. The Letter of Undertaking may address such matters as:
 - Site design, landscaping, grading and servicing and building elevations;
 - Approval for any new driveway entrances;
 - Signage;
 - Security deposits for site improvements;
 - The removal of all structures upon expiration of the lease;
 - A commitment to accommodate other telecommunication companies on site where feasible; and
 - Other conditions as required.

(d) **Proposals on City Land**

- (i) Any proposal from a telecommunication company to acquire or lease land from the City for a telecommunication facility shall be placed on the Development Services Committee agenda;
- (ii) If the proposal has merit then it should be referred to the Council for approval in principle to acquire or lease City land;
- (iii) In the event Council approves in principle the sale or lease of City land, the process for considering the merits of the proposed tower or proposed aboveground equipment shelter shall be coordinated by Planning Services including the scheduling of a public meeting in accordance with this policy;
- (iv) Once Council takes a formal position on a proposal on City land, after any required public meeting, then Development Services will report on the proposed terms of the lease; and
- (v) The process for any proposal that does not require a public meeting shall be coordinated by Development Services.

4.5 Time Limit for Construction

Any antenna system that has followed a consultation process with the City shall be constructed within three (3) years of the conclusion of the consultation process. Extensions to the time limit are permitted for a specified time period if a proponent secures the agreement of the City in writing and provides a copy of the agreement to the local Innovation, Science and Economic Development Canada office.

Note: Minor changes to or deviations from this policy and procedure may be made by the Commissioner of Development Services. Any significant changes must be approved by City Council.

Appendix 1 – Industry Canada’s Default Public Consultation Process - Public Notification Package

The proponent must ensure that at least **30 days** are provided for public comment. Notification must provide all information on how to submit comments to the proponent in writing. Notices must be clearly marked, making reference to the proposed antenna system, so that it is not misinterpreted as junk mail. The notice must be sent by mail or be hand delivered. The face of the package must clearly indicate that the recipient is within the prescribed notification radius of the proposed antenna system. The proponent must also provide a copy of the notification package to the land-use authority and the local Industry Canada office at the same time as the package is provided to the public.

Notification must include, but need not be limited to:

- 1) the proposed antenna system’s purpose, the reasons why existing antenna systems or other infrastructure cannot be used, a list of other structures that were considered unsuitable and future sharing possibilities for the proposal;
- 2) the proposed location within the community, the geographic coordinates and the specific property or rooftop;
- 3) an attestation¹⁹ that the general public will be protected in compliance with Health Canada’s Safety Code 6 including combined effects within the local radio environment at all times;
- 4) identification of areas accessible to the general public and the access/demarcation measures to control public access;
- 5) information on the environmental status of the project, including any requirements under the *Canadian Environmental Assessment Act, 2012*;
- 6) a description of the proposed antenna system including its height and dimensions, a description of any antenna that may be mounted on the supporting structure and simulated images of the proposal;
- 7) Transport Canada’s aeronautical obstruction marking requirements (whether painting, lighting or both) if available; if not available, the proponent’s expectation of Transport Canada’s requirements together with an undertaking to provide Transport Canada’s requirements once they become available;
- 8) an attestation that the installation will respect good engineering practices including structural adequacy;
- 9) reference to any applicable local land-use requirements such as local processes, protocols, etc.;

¹⁹ Example: I, (*name of individual or representative of company*) attest that the radio installation described in this notification package will be installed and operated on an ongoing basis so as to comply with Health Canada’s Safety Code 6, as may be amended from time to time, for the protection of the general public, including any combined effects of nearby installations within the local radio environment.

- 10) notice that general information relating to antenna systems is available on Industry Canada's Spectrum Management and Telecommunications website (<http://www.ic.gc.ca/towers>);
- 11) contact information for the proponent, land-use authorities and the local Industry Canada office; and
- 12) closing date for submission of written public comments (not less than **30 days** from receipt of notification).